

# VERTICAL AXIS WIND ENERGY GENERATOR

T John Institute of Technology/ 1st SEM/

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## PROBLEM STATEMENT

How might we help the people from Inefficient Energy Utilisation Leading to Wastage of Electrical Energy and Limited Sustainability of Existing Solutions..

## TEAM MEMBERS

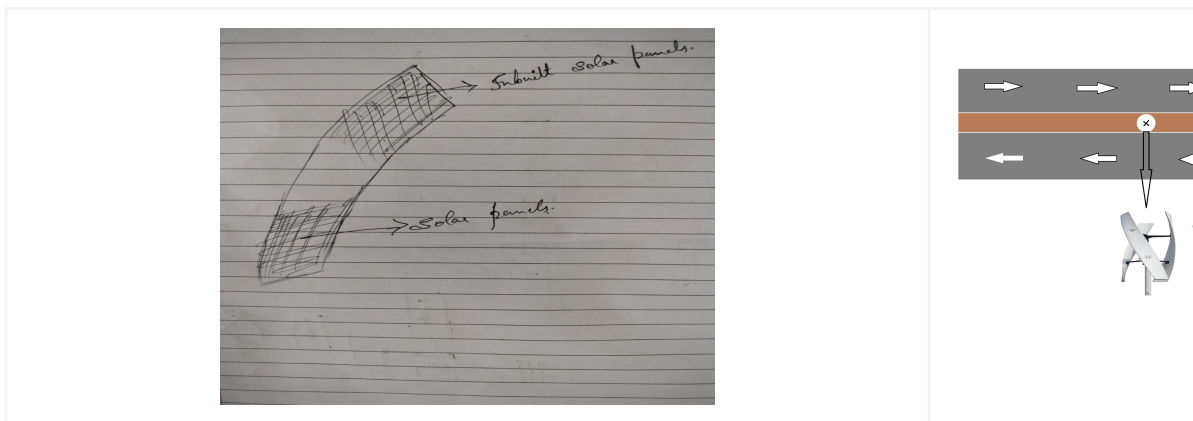
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## INTRODUCTION

In the realm of modern infrastructure, highways have emerged as corridors of both connectivity and untapped energy potential. However, a prevailing issue lies in the underutilization of abundant wind energy along these pathways. The brisk currents generated by vehicular movement hold significant kinetic energy, yet much of this valuable resource dissipates without being harnessed. This inefficiency not only represents a missed opportunity for sustainable energy generation but also highlights the need for innovative solutions that can effectively capture and convert this wasted wind energy into a usable and environmentally beneficial form.

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## IDEA GENERATION

Proposing a visionary solution, we intend to revolutionise energy generation along highways by installing innovative wind turbines on dividers, capitalising on the kinetic energy of passing vehicles' wind currents. Through a groundbreaking design, these turbines will feature fan blades embedded with integrated solar cells, harnessing both wind and solar power simultaneously. This novel approach not only addresses energy wastage but also enhances overall efficiency, potentially outperforming conventional solar panels, especially under varying weather conditions. By seamlessly blending into the highway landscape, this hybrid wind-solar system aims to pave the way for sustainable, visually unobtrusive energy production, marking a significant step towards a greener and more energy-efficient future

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## PROTOTYPE IMAGES

